

ABSTRACT OF THE DISCLOSURE

5 Provided herein is a method of depositing a low
resistivity tungsten film onto a wafer comprising the steps of
introducing a metalorganic tungsten-containing compound into a
deposition chamber of a CVD apparatus; maintaining the deposition
chamber at a pressure and the wafer at a temperature suitable for
the high pressure chemical vapor deposition of the tungsten film
10 onto the wafer; thermally decomposing the tungsten-containing
compound in the deposition chamber; and vapor-depositing the
tungsten film onto the wafer thereby forming a low-resistivity
tungsten film. Specifically provided is a method of depositing a
low-resistivity tungsten film by high pressure MOCVD using
15 tungsten hexacarbonyl as the precursor. Also provided is a low-
resistivity tungsten film.